



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,315	10/01/2004	Rolf-Dieter Pavlik	2002P03969WOUS	4839

7590 01/28/2008
Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

LI, GUANG W

ART UNIT	PAPER NUMBER
----------	--------------

2146

MAIL DATE	DELIVERY MODE
-----------	---------------

01/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/510,315	Applicant(s) PAVLIK ET AL.	
	Examiner Guang Li	Art Unit 2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/15/2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-19 and 23-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-19 and 23-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/01/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/05/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The instant application having Application No. 10/510315 has a total of 20 claims pending in the application; there are 3 independent claims and 17 dependent claims, all of which are ready for examination by the examiner.

Response to Arguments

2. Applicant's arguments, see Remark, filed 11/15/2007, with respect to the rejection(s) of claim(s) 11-19 and 23-33 under 35 USC 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Swales (US 6,321,272).

Oath/Declaration

3. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

Priority

4. As required by **M.P.E.P. 201.14(c)**, acknowledgement is made of applicant's claim for priority based on applications filed on 04/02/2002 (GERMANY 102 14 501.6).

Drawings

5. The drawings are objected to because the unlabeled rectangular box(es) shown in the drawings should be provided with descriptive text labels see Figures 1-5.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version

of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

6. As required by **M.P.E.P. 609(C)**, the applicant's submissions of the Information Disclosure Statements dated 12/05/2007 is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As required by **M.P.E.P 609 C(2)**, a copy of the PTOL-1449 initialed.

Double Patenting

7. Claims 11, 29 and 30 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10, 28 and 29 of Copending Application No. 10/510312. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter claimed in the instant application is disclosed in the referenced copending application and would be covered

by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

Instant Application US Application #: 10/510315 (315')	Copending Application US Application #: 10/510312 (312')
Claim 1. A web server comprising software modules having at least a first software module, the one or more software module proving a first mechanism for implementing an automation functionality and	Claim 1. A web server comprising software modules having at least one first software module proving a first mechanism for implementing an automation functionality and
second mechanism to directly access the real time communication level of a real-time Ethernet.	Second mechanism for access a real-time operating system.
Claim 29. An automation system comprising a web server having software modules , comprising a first mechanism for implementing an automation functionality and	Claim 28. An automation system comprising a web server, wherein the web server comprises software modules , comprising a first mechanism for implementing an automation functionality and
a second mechanism to directly access the real time communication level of a real-time Ethernet	a second mechanism for accessing a real-time operating system
Claim 29. A computer program product comprising a web server software, configure to operate on a web server, having one or more software modules, the software comprising a first mechanism for implementing an automation functionality and	Claim 29. A computer program product comprising a web server comprising software modules , wherein a first software module comprises a first mechanism for implementing an automation functionality and
a second mechanism to directly access the real time communication level of a real-time Ethernet	a second mechanism for accessing a real-time operating system

9. Although the conflict claims are not identical, they are not patentably distinct from each other because 312' discloses a web server and computer program product comprising

- Web server comprising at least one first software module
- Access a real time operating system

312' does not disclose the phrases "**web server having one or more software module**" and "**access the real-time communication level of real-time Ethernet**".

However, it would have been obvious to one of ordinary skill in the art to determine at least one first software that include one or more software module in the web server and in order to access the real-time operating system have to access the real-time communication level a real-time Ethernet. Therefore, they are not patentably distinct from each other.

Therefore, this is Provisional nonstatutory obviousness-type double patenting rejection because the conflicting claims in the copending application.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 11-19 and 23-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As the specification discloses (¶[0006]), "web server comprising **software modules** in which at least a first software module has first means for.....". It is directed to server is software module which direct to

the **software pro se**. It's directed to the program itself, not a process occurring as a result of executing the program, a machine programmed to operate in accordance with the program not a manufacture structurally and functionally interconnected with the program in a manner which enables the program to act as a computer component and realize its functionality. It's also clearly not directed to a composition of matter.

Therefore, it's non-statutory under 35 USC 101.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claim 11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claim 11 recites the limitation "at least a first software module, the one or more software modules" in lines 2. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether the software module "at least a first software module" and "the one or more software module" are the same module or different module or duplicate meaning.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. Claims 11-19 and 23-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Swales (US 6,321,272).
15. Regarding claim 11, Swales teaches a web server (Web server 30 see Fig.2 block 30) comprising software modules (Fig.3 web server module) having at least a first software module, the one or more software modules providing a first mechanism for implementing an automation functionality (programmable controller use to control the process control system "field of programmable controllers and more particularly to a system for the exchange of time-critical information between control devices coupled to an intranetwork such as would be common in the fields of factory automation and industrial process control" see col.1 lines 15-20) and a second mechanism (communication link between Ethernet driver 48 and network 42 see Fig. 3) to directly access the real-time communication level ("provide an interface between the general purpose network and the industrial control system that will allow the transfer of real time control data with guaranteed delivery times" see col.2 lines 31-34) of a real-time Ethernet (web server module can be adapted to different kind of network "Examples of such networks are Ethernet, IBM Token Ring, Fiber Distributed Data Interface, the X.25 international packet switch network and many offerings from telephone companies such as Asynchronous Transfer Mode" see col.1 lines 49-55).

16. Regarding claim 12, Swales teaches the web server according to claim 11, wherein the web server comprises a connection to a communication network (web server module 30 within web server connects to network 42 see Fig.3 block 30 and 42).

17. Regarding claim 13, Swales teaches the web server according to claim 12, wherein the communication network is the Internet (the relationship between a user 2 at a remote location and an Internet web site 4 used for monitoring a process control system 6 through Internet 14 see col.3 lines 56-59; Fig.1).

18. Regarding claim 14, Swales teaches the web server according to claim 11, wherein Internet protocols are provided for communication between the software modules and for communication between the software modules and components outside of the web server (TCP/IP protocol was use in and out of network "General purpose network protocols using this hardware include the increasingly dominant TCP/IP, and Novell IPX, Digital Equipments DECNET and others. The TCP/IP-Ethernet combination, in particular, is the most widely deployed computer network interface in use, and therefore has minimum cost to implement and support" see col.1 lines 56-61; col.4 lines 6-7).

19. Regarding claim 15, claim 15 is rejected for the same reason as claim 14 as set forth hereinabove.

20. Regarding claim 16, Swales teaches the web server according to claim 11, wherein the web server is adapted for configuration and administration of the software modules (administrator access the web server to control the backplane application "The gateway 72 contains a firewall to provide the necessary security and couples the PLC

system 70 through an intranetwork 74 controlled by a network administrator 76" see col.9 lines 65-67 and col.10 lines 1-12).

21. Regarding claims 17 and 18, they are rejected for the same reason as claim 16 as set forth hereinabove.

22. Regarding claim 19, Swales teaches the web server according to claim 11, wherein the first software module comprises a connection to an industrial automation system (interface between the general purpose network and the **industrial control system** that will carry on-demand traffic from computer systems, operator terminals, and alarm systems see col.2 lines 35-39).

23. Regarding claim 23, Swales teaches the web server according to claim 11, wherein the web server comprises a connection to Internet via a firewall (A firewall or security for the overall system can be included in the Web Server 30, but is generally maintained as part of the network interface 16 see col.4 lines 39-41).

24. Regarding claim 24, Swales teaches the web server according to claim 11, wherein the web server is connected via a communication network to a web browser as a control and monitoring system (The browser 10 functions as a remote human-machine interface or HMI control of the process control system and user at a remote location utilizing a browser which controlling a programmable controller system see col.4 lines 31-33; Fig.7).

25. Regarding claims 25-26, they are rejected for the same reason as claim 24 as set forth hereinabove.

26. Regarding claim 27, Swales teaches the web server according to claim 11, wherein the web server comprises a real-time operating system (A real time operating system 44 controls the interaction between the components. The operating system 44 allocates central processor (CPU) 46 to various tasks, provides memory management, and provides a set of message services and signal services see col.5 lines 9-13).

27. Regarding claim 28, claim 28 is rejected for the same reason as claim 27 as set forth hereinabove.

28. Regarding claim 29, claim 29 is rejected for the same reason as claim 11 as set forth hereinabove. Regarding claim 29, Swales taught the claimed system, therefore he teaches the claimed automation system (It would be desirable to develop an automation control system whereby these problems are minimized, using the same type of general purpose networks see col:2 lines 18-24).

29. Regarding claim 30, claim 30 is rejected for the same reason as claim 11 as set forth hereinabove. Regarding claim 30, Swales taught the claimed system, therefore he teaches the claimed computer program product (CPU and real time operating system in the web server module see Fig.3).

30. Regarding claim 31, Swales teaches the web server of claim 11 wherein the first mechanism is a controller of components and processes (Backplane driver and Ethernet driver use for controlling process see Fig.3 blocks 50 and 56), wherein the web server includes a TCP/IP stack (Fig.3 block 54) and wherein direct access to the real-time communication level is effected by a direct connection between the TCP/IP stack and an automation device with communication by means of a TCP/IP- based real-time

Ethernet protocol (Ethernet and backplane driver user the TCP/IP stack protocol to transmit messages "The TCP/IP stack 54 calls the Ethernet driver 48 to transmit a message. The Ethernet driver 46 attempts to allocate a buffer from the shared memory 52. If it succeeds, it copies the message into the buffer, and places the buffer into the AM79C961 transmit queue" see col.5 lines 35-45).

31. Regarding claims 32-33, they are rejected for the same reason as claim 31 as set forth hereinabove.

Conclusion

The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.05(c)**.

The following reference teaches execution of trial data.

- US 6, 311,101 (Kastner) teaches remote monitoring or remote maintenance an injection molding machine
- US 2002/0065898 A1 (Leontiev et al.) teach control and supervision of instruments and apparatus such as controllers, panel meters, transmitter, signal conditioners and the like.
- US 2004/0015383 A1 (Rathjen et al.) teach method and system for collecting, visualising and/or modifying operating data of at least one machine.

The examiner requests, in response to this Office action, support be shown for language added to any original claims on amendment and any new claims. That is,

indicate support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guang Li whose telephone number is (571) 270-1897. The examiner can normally be reached on Monday-Friday 8:30AM-5:00PM(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JEFFREY PWU
SUPERVISORY PATENT EXAMINER